

# California MLPA Initiative MLPA North Coast Study Region: Round 2 Evaluations Staff Summary of Area and Habitats in Ruby Draft MPA Proposal 1 Document Created: June 17, 2010

Table 1. Summary of MPAs by Designation for Ruby Draft MPA Proposal 1

Type of MPA <sup>a</sup>	# of MPAs	Area (mi²)	% of Study Region
State Marine Reserve (SMR)	5	53.35	5.2%
State Marine Recreational Managed Area (SMRMA)	3	5.68	0.6%
State Marine Park (SMP)	1	0.30	<0.1%
State Marine Conservation Area (SMCA)	14	87.79	8.5%
All MPAs combined	23	147.12	14.3%

<sup>&</sup>lt;sup>a</sup> These are proposed marine protected area (MPA) designations, NOT levels of protection assigned by the MLPA Master Plan Science Advisory Team (SAT). SMRMA is not an MPA designation, but rather a marine managed area designation.

Table 2. Summary of MPAs by Level of Protection for Ruby Draft MPA Proposal 1

Level of Protection (LOP)	# of MPAs	Area (mi²)	% of Study Region
Very High <sup>b</sup>	5	53.35	5.2%
High	0	0.00	0.0%
Moderate-High	3	57.93	5.6%
Moderate	0	0.00	0.0%
Low <sup>c</sup>	3	0.95	0.1%
Undetermined <sup>d</sup>	12	34.88	3.4%
Total	23	147.12	14.3%

b The "Very High" category includes MPAs with SMR designation, as well as SMRMA designations that do not propose tribal uses.

Table 3. Individual MPAs in Ruby Draft MPA Proposal 1

MPA Name	Size <sup>e</sup> (mi <sup>2</sup> )	Alongshore Spanf (mi)	Depth Range <sup>g</sup> (ft)
Pyramid Point SMR	9.59	2.3	15 - 111
Pyramid Point SMCA <sup>h</sup>	0.87	2.3	0 - 19
Point St. George Reef SMCA	12.26	4.3	160 - 399
False Klamath Cove SMCA <sup>h</sup>	9.85	2.2	0 - 121
Reading Rock Offshore SMCA	22.24	3.5	23 - 251
Reading Rock Nearshore SMCA <sup>h</sup>	1.85	3.5	0 - 41
Stone Lagoon SMRMA <sup>h</sup>	0.95	N/A	Depth data not available
Samoa SMCA <sup>h</sup>	13.03	3.6	0 - 158
North Humboldt Bay SMRMA <sup>h</sup>	1.89	N/A	Depth data not available

<sup>&</sup>lt;sup>c</sup> The "Low" category groups together MPAs that are assigned a moderate-low and low level of protection.

d The "Undetermined" category includes MPAs that propose traditional, non-commercial, tribal uses, but do not identify the species and gear types. These MPAs may or may not have additional proposed allowed uses.

MPA Name	Size <sup>e</sup> (mi <sup>2</sup> )	Alongshore Spanf (mi)	Depth Rangeg (ft)
South Humboldt Bay SMRMA <sup>h</sup>	2.83	N/A	Depth data not available
South Cape Mendocino SMR	9.60	1.6	0 - 277
Mattole Canyon SMR	9.69	3.5	82 - 1646
Petrolia Lighthouse SMR	14.45	3.2	0 - 375
Vizcaino SMCA	23.43	6.3	0 - 395
Ten Mile SMR	10.03	3.2	57 - 343
Ten Mile SMCA <sup>h</sup>	2.61	3.2	0 - 100
Ten Mile Estuary SMCA <sup>h</sup>	0.19	N/A	Depth data not available
MacKerricher SMCA	0.84	3.6	0 - 38
Point Cabrillo SMCA <sup>h</sup>	0.30	0.7	0 - 40
Russian Gulch SMCA	0.09	0.7	0 - 3
Big River Estuary SMP <sup>h</sup>	0.30	N/A	Depth data not available
Van Damme SMCA	0.02	0.2	0 - 11
Navarro River Estuary SMCA <sup>h</sup>	0.20	N/A	Depth data not available

<sup>&</sup>lt;sup>e</sup> Size is measured in square statue miles.

Table 4. Habitat Representation in Ruby Draft MPA Proposal 1

	SM	1R	SMF	RMA	SN	1P	SM	CA	Total	MPAs
<u>Habitat<sup>i</sup></u>	Area	%	Area	%	Area	%	Area	%	Area	%
				Intertid	al					
Sandy or gravel beach*	0.84	<1%	0.00	0%	0.19	<1%	19.20	11%	20.24	11%
Rocky shores*	4.49	3%	0.28	<1%	0.73	<1%	20.99	13%	26.48	17%
Hardened shores*	0.00	0%	0.00	0%	0.00	0%	0.00	0%	0.00	0%
Coastal marsh*	0.00	0%	6.52	7%	3.55	4%	2.94	3%	13.01	15%
Coastal marsh	0.00	0%	0.40	11%	0.05	1%	0.07	2%	0.51	15%
Tidal flats*	0.00	0%	10.71	16%	0.28	<1%	0.36	1%	11.35	17%
			Ç	Seagrass	beds					
Humboldt Eelgrass	0.00	0%	0.31	4%	0.00	0%	0.00	0%	0.31	4%

f Alongshore span measured as direct line from one end of the MPA to the other, roughly paralleling the coastline. An alongshore span is not calculated for estuarine MPAs.

Comprehensive bathymetric data for all estuaries is not available. Though bathymetric data do exist in portions of some estuaries, depth ranges are not provided for estuarine MPAs for consistency in evaluations.

<sup>&</sup>lt;sup>h</sup> Tribal uses are proposed in this MPA.

	SN	ЛR	SMF	RMA	SN	ЛР	SM	CA	Total	MPAs
Habitat <sup>i</sup>	Area	%	Area	%	Area	%	Area	%	Area	%
				Estua	rine					
Estuary	0.00	0%	5.68	13%	0.30	1%	0.39	1%	6.37	15%
				Hard bo	ttom					
0-30 meters proxy (original)* <sup>,j</sup>	1.82	3%	0.00	0%	0.00	0%	3.98	7%	5.80	11%
0-30 meters proxy (revised)* <sup>,j</sup>	1.77	4%	0.00	0%	0.00	0%	3.39	7%	5.15	11%
15 meter isobath*, <sup>j</sup>	0.89	2%	0.00	0%	0.00	0%	4.00	8%	4.89	10%
0-30 meters <sup>j</sup>	1.06	3%	0.00	0%	0.00	0%	1.97	6%	3.03	9%
30-100 meters	6.74	20%	0.00	0%	0.00	0%	0.95	3%	7.69	23%
100-200 meters	0.25	36%	0.00	0%	0.00	0%	0.00	0%	0.25	36%
>200 meters	0.02	28%	0.00	0%	0.00	0%	0.00	0%	0.02	28%
				Soft bott	om					
0-30 meters proxy (original)* <sup>,j</sup>	5.97	3%	0.00	0%	0.00	0%	15.04	8%	21.01	12%
0-30 meters proxy (revised)* <sup>,j</sup>	6.02	3%	0.00	0%	0.00	0%	15.64	9%	21.66	12%
15 meter isobath* <sup>,j</sup>	7.04	4%	0.00	0%	0.00	0%	15.41	8%	22.45	12%
0-30 meters <sup>j</sup>	11.40	4%	0.00	0%	0.00	0%	24.23	8%	35.64	12%
30-100 meters	25.96	6%	0.00	0%	0.00	0%	46.60	10%	72.56	16%
100-200 meters	3.75	6%	0.00	0%	0.00	0%	5.71	9%	9.46	15%
>200 meters	1.61	21%	0.00	0%	0.00	0%	0.00	0%	1.61	21%
				Unkno	wn					
0-30 meters	2.30	2%	5.68	4%	0.30	<1%	8.27	6%	16.55	13%
30-100 meters	0.24	8%	0.00	0%	0.00	0%	0.06	2%	0.30	10%
100-200 meters	0.00	0%	0.00	0%	0.00	0%	0.00	0%	0.00	0%
>200 meters	0.00	0%	0.00	0%	0.00	0%	0.00	0%	0.00	0%
				Other	•					
Offshore rocks*	1.49	3%	0.00	0%	0.00	0%	5.56	10%	7.05	13%
Canyon	1.50	20%	0.00	0%	0.00	0%	0.00	0%	1.50	20%
Linear kelp*	0.32	1%	0.00	0%	0.00	0%	4.72	9%	5.04	10%

Habitats are measured as an area (mi2) except for those with a \* notation. Habitats with a \* notation are expressed in linear units (mi).

Four measurements for hard and soft substrate within the 0-30 meter zone have been included here for reference. The MLPA Master Plan Science Advisory Team (SAT) Habitat Work Group is recommending to the full SAT that the revised 0-30 meter proxy line is most appropriate measure for use in the habitat analyses; this approach will be discussed at the June 29-30, 2010 SAT meeting.

#### **MLPA North Coast Study Region** Round 2 - Ruby Draft MPA Proposal 1 Northern Bioregion (California/Oregon border to Mattole River) California Marine Life Protection Act (MLPA) Initiative **Pyramid Point SMR** alifornia Allowed uses: No allowed take Oregon **Pyramid Point SMCA** Allowed uses No allowed take. Nevada Point St. George Reef SMCA Tribal uses proposed Recreational take of salmon by troll: Dungeness crab by trap; Commercial take of salmon by troll and Dungeness crab by trap. **Crescent City** Southwest Seal Rock **Special Closure** Castle Rock **Special Closure** False Klamath Rock **Special Closure** Legend False Klamath Cove SMCA damath River Proposed State Marine Allowed uses: Rrecreational take of salmon by troll; Conservation Area (SMCA) Dungeness crab by trap, hoop net; and diving. Commercial take of salmon by troll; and Dungeness crab by trap. Proposed State Marine Park (SMP) Ossagon Creek Tribal uses proposed Reading Rock Offshore SMCA Proposed State Marine Reserve (SMR) Recreational take of salmon by troll; Dungeness crab by trap, hoop net and diving. Proposed State Marine Recreational The commercial take of salmon by troll; Management Area (SMRMA) and Dungeness crab by trap Reading Rock Nearshore SMCA Stone Lagoon SMRMA **Proposed Special Closure** See additional maps and materials. Allowed uses: Allowed uses Recreational take of surfperch by hook Waterfowl hunting. and line from shore; salmon by troll; North Coast Study Region Boundary Dungeness crab by trap, hoop net, Tribal uses proposed. and diving: surf and night smelt by dip net; Redtail surfperch by hook and line from shore The commercial take of salmon by troll: and Dungeness crab by trap. Tribal uses Proposed Little River Arcata-Eureka Airport **Green Rock Special Closure** Flatiron Rock Special Closure Blue Lake Samoa SMCA Allowed uses: Recreational take of salmon by troll; 10 Statute Miles Dungeness crab by trap, hoop net South Humboldt Bay and diving. SMRMA North Humboldt Bay SMRMA Commercial take of salmon by troll; 10 Kilometers Dungeness crab by trap. Allowed uses: Allowed uses: Waterfowl hunting Waterfowl hunting Tribal uses Proposed. Tribal uses Proposed Tribal uses proposed. Created by MarineMap Cartographic Division, UCSB. Date: 12 July 2010 For more information, visit: False Cape Rock Special Closure http://www.northcoast.marinemap.org Tribal uses proposed: Rio Dell The NCRSG has proposed to allow "tribal uses" in some MPAs. However, current California law does not provide the legal framework for allowing exclusive "tribal uses" [http://www.dfg.ca.gov/mlpa/meeting\_022510.asp]. To regulate take in MPAs, species and gear types must Bear River South Cape Mendocino SMR be identified and regulations apply to all users as specified. Allowed uses: No allowed take Sugarloaf Island Special Closure This map represents a draft marine protected area (MPA) proposal developed by the MLPA North Coast Regional Stakeholder Group (NCRSG). This draft MPA proposal is under review; it is NOT a recommendation to the California Fish and Game Commission. Proposed special closures displayed on this map have been developed by the NCRSG separately from the draft MPA proposal and are displayed here for reference only during the second round of a three-round MPA planning process. Mattole Canyon SMR Steamboat Rock Special Closure Allowed uses: No allowed take Mattole River

#### **MLPA North Coast Study Region** Round 2 - Ruby Draft MPA Proposal 1 Southern Bioregion (Mattole River to Alder Creek) California Marine Life Protection Act (MLPA) Initiative Sugarloaf Island Special Closure Oregon **Steamboat Rock Special Closure** Nevada Petrolia Lighthouse SMR Legend No allowed take Proposed State Marine Conservation Area (SMCA) Whale Gulch Vizcaino SMCA Proposed State Marine Park (SMP) **Rockport Rocks Special Closure** Allowed uses: Recreational take of salmon by troll; Proposed State Marine Reserve (SMR) Dungeness crab by trap; Commercial take of salmon by troll; Dungeness crab by trap. Vizcaino Rock Proposed State Marine Recreational Tribal uses Proposed **Special Closure** Management Area (SMRMA) (seasonal) **Proposed Special Closure** See additional maps and materials Ten Mile Ten Mile SMCA North Coast Study Region Boundary **Estuary SMCA** Tribal uses proposed Ten Mile SMR Allowed uses: Allowed uses: No allowed take. No allowed take. Tribal uses MacKerricher SMCA proposed Allowed uses: Point Cabrillo SMCA Existing allowed uses apply, see associated materials for details. Allowed uses: Fort Brag No allowed take. Noyo River Tribal uses proposed 10 Statute Miles Russian Gulch SMCA Existing allowed uses apply, see associated materials for details. Albion River Created by MarineMap Cartographic Division, UCSB. **Big River Estuary SMP** Date: 12 July 2010 Navarro River Allowed uses: For more information, visit: Recreational take of Dungeness crab http://www.northcoast.marinemap.org Van Damme SMCA by trap and by diving. Tribal uses proposed: Allowed uses: Tribal uses proposed The NCRSG has proposed to allow "tribal uses" in some MPAs. However, current California law does not provide Existing allowed uses apply, the legal framework for allowing exclusive "tribal uses" [http://www.dfg.ca.gov/mlpa/meeting\_022510.asp]. To regulate take in MPAs, species and gear types must see associated materials for details. be identified and regulations apply to all users as specified. Navarro River Estuary SMCA This map represents a draft marine protected area (MPA) proposal developed by the MLPA North Coast Regional Stakeholder Group (NCRSG). This draft MPA proposal is under review; it is NOT a recommendation to the California Fish and Game Commission. Proposed special closures displayed on this map have been developed by the NCRSG separately from the draft MPA proposal and are displayed here for reference only during the second round of a three-round MPA planning process. Point Arena Allowed uses: Recreational take of Salmonids by hook and line. Point Arena Tribal uses proposed

## California Marine Life Protection Act Initiative North Coast Project

## Description of MPAs Table for Ruby Draft MPA Proposal 1

### This table contains the following information:

- Proposed MPA name and MPA ID
- Bioregion the MPA is located in (northern or southern bioregion)
- Description of boundaries
- Proposed designation type
- Proposed take regulations as well as other proposed regulations
- Site-specific rationale: Brief statement that explains main purpose of MPA
- Other design considerations: Key factors that influenced the design of the MPA
- A table of existing MPAs describing whether each will be retained, modified or removed (last page of this packet)

For more information on Round 2 draft MPA proposals, please visit: http://www.dfg.ca.gov/mlpa/mpaproposals\_nc.asp

### Round 2: Description of Marine Protected Areas (MPAs) in Ruby Draft MPA Proposal 1 Spreadsheet Created May 27, 2010

Name of Array: Ruby Draft MPA Proposal 1

Author: NCRSG Ruby Gem Group

Number of SMRs:

Proposal Submitted: May 20, 2010

Number of SMCAs:

Number of SMPs:

14

Northern Bioregion: California/Oregon border to Mattole River

Number of SMRMAs:

3

Northern Bioregion: California/Oregon border to Mattole River

Number of SMRMAs:

Southern Bioregion: Mattole River to Alder Creek near Point Arena

Number proposing tribal us

12

MPA Name	MPA ID	Bioregion	MPA Boundaries (Exact or Approximate)	Designation	Preliminary Level of Protection*	Propose Tribal Uses?	Proposed Take Regulations
Pyramid Point SMR	1001246	Northern	North Boundary: Approximately, north latitude 41 59.450 using a sand/rocky point interface for a landmark boundary. West Boundary: The state water boundary South Boundary: North latitude 41 57.500 East Boundary: 124 12.800	SMR	Very High	No	Take of all living marine resources is prohibited.
Pyramid Point SMCA	1001249	Northern	North Boundary: Approximately north latitude 41 59.450 from mean high tide line to west longitude 124 12.800. Using onshore landmark of sand/rocky point interface. West Boundary: West longitude 124 12.800 South Boundary: North latitude 41 57.500 from mean high tide line to west longitude 124 12.800 East Boundary: Mean high tide line	SMCA	Undetermined	Yes	Take of all living marine resources is prohibited except:  1. Traditional, non-commercial, tribal gathering, subsistence, harvesting, ceremonial and stewardship activities.
Point St. George Reef SMCA	1001258	Northern	North Boundary: State water boundary West Boundary: State water boundary South Boundary: North latitude 41 48.000 extending from west longitude 124 23.000 west to state water boundary: West longitude 124 23.000 extending from north latitude 41 48.000 north to state water boundary	SMCA	Moderate High	No	The take of all living marine resources is prohibited except:  1. The recreational take of salmon by troll; and Dungeness crab by trap.  2. The commercial take of salmon by troll; and Dungeness crab by trap.

## California MLPA North Coast Study Region Round 2: Description of Marine Protected Areas (MPAs) in Ruby Draft MPA Proposal 1 Spreadsheet Created May 27, 2010

MPA Name	Other Proposed Regulations	Site-specific Rationale	Other Considerations
Pyramid Point SMR	None specified	Protects a diversity of habitats. Includes shallow reef, soft bottom, and kelp forest habitats, and several off-shore rocks important for sea bird colonies and waterfowl (Aleutian geese). The reserve will enhance protections for marine mammals and Chinook salmon, steelhead, and threatened southern Oregon/Northern California Coastal Coho stocks, and protect kelp forest, red tail surf perch, smelt, nearshore rockfish, red abalone, razor clams and Dungeness crab.	Provides clear and enforceable boundaries. Provides vessel access (Port of Brookings, OR) for study or enforcement. Reduces distance from Crescent City to fishing grounds and improves safety of Crescent City fishers. Reduces economic impacts to sport and commercial fisheries in California's highest poverty level area. This SMR is clustered with the Pyramid Point SMCA which was designed to recognize traditional tribal shore uses that have occurred for thousands of years.  Northern boundary avoids Pelican State Beach where public access for fishing (shore angling) is one of the primary purposes of the area and where alternative public access for shore angling is very limited and the southern boundary was designed to avoid the mouth of the Smith River and Prince Island.
Pyramid Point SMCA	None specified	Protects a diversity of habitats. Includes rocky shores, beaches, shallow reef, soft bottom, and kelp forest habitats, and several off-shore rocks important for sea bird colonies and waterfowl (Aleutian geese). The reserve will enhance protections for marine mammals and Chinook salmon, steelhead, and threatened southern Oregon/Northern California Coastal Coho stocks, and protect kelp forest, red tail surf perch, smelt, nearshore rockfish, red abalone, razor clams and Dungeness crab.	This MPA is designed to connect with the offshore SMR and provide equivalent inshore protection (no commercial or recreational take) as the reserve while allowing tribal uses.  Northern boundary avoids Pelican State Beach where public access for fishing (shore angling) is one of the primary purposes of the area and where alternative public access for shore angling is very limited.
Point St. George Reef SMCA	None specified	This MPA is designed to protect deeper rocky reef habitats while minimizing the socioeconomic impacts on Crescent City harbor.	The area contains the only offshore banks north of Point Reyes in state waters; good reef structure.  Design overlaps with existing RCAs to minimize further impact.

MPA Name	MPA ID	Bioregion	MPA Boundaries (Exact or Approximate)	Designation	Preliminary Level of Protection*	Propose Tribal Uses?	Proposed Take Regulations
False Klamath Cove SMCA	1001257	Northern	Northern Boundary 41 35.7 Southern Boundary: North latitude ~41 33.825, comes directly west off southern point of a small point. Western Boundary: State water boundary Eastern Boundary: Mean high tide line	SMCA	Undetermined	Yes	The take of all living marine resources is prohibited except:  1. The recreational take of salmon by troll; Dungeness crab by trap; Dungeness crab by hoop net; and Dungeness crab by diving.  2. The commercial take of salmon by troll; and Dungeness crab by trap.  3. Traditional, non-commercial, tribal gathering, subsistence, harvesting, ceremonial and stewardship activities.
Reading Rock Offshore SMCA	1001227	Northern	North Boundary: North latitude 41 24.000 extending from west longitude 124 05.000 west to state water boundary. South Boundary: North latitude 41 21.000 extending from west longitude 124 05.000 west to state water boundary. West Boundary: State water boundary East Boundary: West longitude 124 05.000	SMCA	Moderate High	No	The take of all living marine resources is prohibited except:  1. The recreational take of salmon by troll; Dungeness crab by trap; Dungeness crab by hoop net; and Dungeness crab by diving.  2. The commercial take of salmon by troll; and Dungeness crab by trap.
Reading Rock Nearshore SMCA	1001228	Northern	North boundary: North latitude 41 24.000 from the mean high tide west to west longitude 124 05.000 South boundary: North latitude 41 21.000 from the mean high tide line west to west longitude 124 05.000 West boundary: West longitude 124 05.000 East boundary: Mean high tide	SMCA	Undetermined	Yes	The take of all living marine resources is prohibited except:  1. The recreational take of surfperch by hook and line from shore; salmon by troll; Dungeness crab by trap; Dungeness crab by hoop net; Dungeness crab by diving; surf and night smelt by dip net; and redtail surfperch by hook and line from shore.  2. The commercial take of salmon by troll; and Dungeness crab by trap.  3. Traditional, non-commercial, tribal gathering, subsistence, harvesting, ceremonial and stewardship activities.

MPA Name	Other Proposed Regulations	Site-specific Rationale	Other Considerations
False Klamath Cove SMCA	opportunity with the Yurok Tribe. Portion of MPA	Protects upwelling area that feeds lingcod, cabezon, kelp greenling, surfperches, Dungeness crab, murres, guillemots, cormorants, auklets, seals, sea lions and invertebrates. This is also a destination and known habitat for grey whales. Includes Wilson Rock, an important seabird breeding colony.	This SMCA is intended to allow tribal uses and recreational and commercial take of crab and salmon.  Adjacent to Redwoods State Park and is co-located with an ASBS (co-location follows SAT recommendations for the water quality).  Incorporates tidepools along the shore, which are known habitat for juvenile rockfish. Protecting these habitats will assist in the protection of commercial and recreational rock fisheries in the area.  Park currently has marine research and monitoring projects off the coast, and this MPA would allow for more rigorous monitoring.  The north boundary is easy to recognize because it corresponds with the end of the accessible area of the beach and lines up with the terminus of a prominent rocky peninsula. Boundary excludes and preserves shore and small boat based fishing opportunities at Klamath Cove Beach which is directly accessible from State Hwy 101 and is heavily used by the public. The south boundary is designed to avoid overlap with lands within the boundary of the Yurok Reservation
Reading Rock Offshore SMCA	None specified	Combined with the Reading Rock Nearshore SMCA, this conservation area is designed to protect soft and hard bottom communities.	None specified
Reading Rock Nearshore SMCA	None specified	Combined with the Reading Rock Offshore SMCA, this SMCA protects diverse habitats including beaches, soft and hard bottom habitats.	This SMCA is intended to allow tribal uses and some recreational and commercial take.  Note that anecdotal accounts indicate more rocky habitat than is depicted in MarineMap.

MPA Name	MPA ID	Bioregion	MPA Boundaries (Exact or Approximate)	Designation	Preliminary Level of Protection*	Propose Tribal Uses?	Proposed Take Regulations
Stone Lagoon SMRMA	1001441	Northern	Extent of the lagoon in state waters to the mouth of the lagoon.	SMRMA	Undetermined	Yes	Take of all living marine resources is prohibited except:  1. Traditional, non-commercial, tribal gathering, subsistence, harvesting, ceremonial and stewardship activities.
Samoa SMCA	1001532	Northern	North Boundary: North latitude 40 55.000 to the extent of state waters West Boundary: The state water boundary South Boundary: North latitude 40 52.000 to the extent of state waters East Boundary: Mean high tide line	SMCA	Undetermined	Yes	The take of all living marine resources is prohibited except:  1. The recreational take of salmon by troll; Dungeness crab by trap; Dungeness crab by hoop net; and Dungeness crab by diving.  2. The commercial take of salmon by troll; and Dungeness crab by trap.  3. Traditional, non-commercial, tribal gathering, subsistence, harvesting, ceremonial and stewardship activities.
North Humboldt Bay SMRMA	1001517	Northern	North Boundary: Extent of state waters West Boundary and South Boundary: Diagonal line from the middle of the point at west longitude 124 07.00 to the landmark in the southeast (northern edge of outcrop) East Boundary: Extent of state waters	SMRMA	Undetermined	Yes	Take of all living marine resources is prohibited except:  1. Traditional, non-commercial, tribal gathering, subsistence, harvesting, ceremonial and stewardship activities.
South Humboldt Bay SMRMA	1001439	Northern	Extent of state waters south of a northern boundary coming directly east off the prominent point on the west side of the bay.	SMRMA	Undetermined	Yes	Take of all living marine resources is prohibited except:  1. Traditional, non-commercial, tribal gathering, subsistence, harvesting, ceremonial and stewardship activities.

<sup>\*</sup> Preliminary LOPs are considered draft and may change based on the SAT's review of allowed uses.

MPA Name	Other Proposed Regulations	Site-specific Rationale	Other Considerations
Stone Lagoon SMRMA	Waterfowl hunting allowed.	Protecting intact lagoon and rare habitat for both migratory and sea birds, as well rare plants species.	This MPA is designed to provide equivalent protection (no commercial or recreational take) as an SMR while allowing tribal uses.  Only intact lagoon in the study region, and perhaps on the west coast.  While California State Parks has some small recreational developments along the shore of the lagoon, no significant development has taken place, and the lagoon has limited access and has never been de-watered or diked.
Samoa SMCA	Allow beach replenishment activities.	Protect beach habitat and biodiversity and provide goal 3 opporutnities.	This SMCA is intended to allow tribal uses and only recreational and commercial take of crab and salmon.  Some overlap with the wave-energy lease area.
North Humboldt Bay SMRMA	Allow for restoration permits and removal of invasive species in the area and waterfowl hunting.	This MPA protects many species that use the mud flats, deeper channels and eel grass habitats, including migratory birds and captures a very rare site where both White and Green Sturgeon, a threatened species, mix and feed.	This MPA is designed to provide equivalent protection (no commercial or recreational take) as an SMR while allowing tribal uses. Arcata Marsh and Wildlife Sanctuary attracts hundreds of migratory and local shore birds that will benefit from protecting their feeding and breeding sites. it is co-located with the Sanctuary and will benefit the regulatory requirements.  Boundary designed to avoid current mariculture leases.
South Humboldt Bay SMRMA	Allow for restoration permits and removal of invasive species in the area and waterfowl hunting.	Protect biodiversity and key habitats and nursery grounds for marine species.	This MPA is designed to provide equivalent protection (no commercial or recreational take) as an SMR while allowing tribal uses. Key point for the millions of migratory birds that rely on the Pacific Flyway. More than 200 bird species, including 80 water birds and 4 endangered species, feed, rest, and/or nest on the refuge or other areas around the bay. Protects critical habitat for seabirds, migratory waterfowl, plants, harbor seals and marine mammals. Important nursery for marine and estuary fishes, including halibut, leopard sharks and rays. Provides habitat for approximately 100 fish species, many of which contribute to sport/commercial fisheries. Provides habitat for steelhead, Coho and Chinook salmon. Estuary habitat is in unique close proximity to a Wildlife Refuge adjacent to the South Bay. Little socioeconomic impact in this portion of the Bay. Extensive opportunities for ongoing research and public education including already existing activities by local schools, universities and interest groups.

<sup>\*</sup> Preliminary LOPs are considered draft and may change based on the SAT's review of allowed uses.

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MPA Name South Cape Mendocino SMR	<b>MPA ID</b> 1001215	<b>Bioregion</b> Northern	MPA Boundaries (Exact or Approximate)  North Boundary: North latitude 40 25.800 to the extent of state	<b>Designation</b> SMR	Preliminary Level of Protection* Very High	Propose Tribal Uses?	Proposed Take Regulations  Take of all living marine resources is prohibited.
			waters West Boundary: The state water boundary South Boundary: North latitude 40 24.500 to the extent of state waters East Boundary: Mean high tide line				
Mattole Canyon SMR	1001216	Northern	North Boundary: North latitude 40 20.0 to the extent of state waters West Boundary: The state water boundary South Boundary: North latitude 40 17.0 to the extent of state waters East Boundary: 124 22.5	SMR	Very High	No	Take of all living marine resources is prohibited.
Petrolia Lighthouse SMR	1001812	Southern	North Boundary: North latitude 40 14.200 to the extent of state waters West Boundary: The state water boundary South Boundary: North latitude 40 12.000 (mouth of Randall Creek) to the extent of state waters East Boundary: Mean high tide line	SMR	Very High	No	Take of all living marine resources is prohibited.
Vizcaino SMCA	1001556	Southern	North Boundary: North latitude 39° 48.4' (NE corner: south side of Usal Rock) West Boundary: The state water boundary South Boundary: North latitude 39° 43.000 from west longitude 123 50.000 (line coming directly south from the northwest corner of Vizcaino Rock) to extent of state waters East Boundary: West longitude 123 50.000 at north latitude 39 43.000 going directly north to the northwest corner of Vizcaino Rock (landmark is main boundary) and then directly east to the mean high tide line	SMCA	Moderate High	No	The take of all living marine resources is prohibited except:  1. The recreational take of salmon by troll; and Dungeness crab by trap.  2. The commercial take of salmon by troll; and Dungeness crab by trap.

SMCA=state marine conservation area SMP=state marine park SMRMA=state marine recreational management area SMR=state marine reserve

<sup>\*</sup> Preliminary LOPs are considered draft and may change based on the SAT's review of allowed uses.

### California MLPA North Coast Study Region Round 2: Description of Marine Protected Areas (MPAs) in Ruby Draft MPA Proposal 1

Spreadsheet Created May 27, 2010

MPA Name	Other Proposed Regulations	Site-specific Rationale	Other Considerations
South Cape Mendocino SMR	None specified	This MPA was designed to protect biodiversity.	None specified
Mattole Canyon SMR	None specified	It has a variety of diverse habitats including upwelling zones, submarine canyons, reef structures, and improves study opportunities provided by marine ecosystems that are subject to minimal human impacts.	Captures off-shore marine canyons on both sides of the bio-regional split. Meets or exceeds sizing guidelines.
Petrolia Lighthouse SMR	None specified	The Petrolia Lighthouse SMR protects rocky shores, captures kelp, hard 0-30m and 30-100m habitat, offshore rocks and includes all levels of soft habitat. Additionally, important seabird and sea lion rookeries are protected.	While neither the Mattole or the Petrolia Lighthouse MPAs are preferred size, the proximity of the Mattole Canyon SMR and Petrolia Lighthouse SMR to each other should function effectively as a cluster.
Vizcaino SMCA	None specified	Protect an area rich in primarily rocky shore habitat with a high diversity of benthic species characteristic of the north coast. Marine mammal haulout spots and marine bird rookeries blanket the coastline. Help protect larval sources and enhance reproductive capacity of shelf species including rockfishes. Both soft and hard bottom habitat thresholds are met for 0-30m. Provide protection to area that contains one of most persistent and important upwelling plumes along entire California Coast and provides for significant downstream larval dispersal, which will help restore depleted species.	Socioeconomic impacts were considered when developing the level of protection to allow commercial and recreational crabbing and salmon trolling. The southeastern corner boundary was adjusted to reduce negative socioeconomic impact to the urchin fishery.  This MPA is positioned near the center of the bioregion South of Gorda capturing and protecting several key habitats defined by the SAT.

SMCA=state marine conservation area SMP=state marine park SMRMA=state marine recreational management area SMR=state marine reserve

<sup>\*</sup> Preliminary LOPs are considered draft and may change based on the SAT's review of allowed uses.

### Round 2: Description of Marine Protected Areas (MPAs) in Ruby Draft MPA Proposal 1

Spreadsheet Created May 27, 2010

MPA Name Ten Mile SMR	MPA ID 1001273	Bioregion Southern	MPA Boundaries (Exact or Approximate)  North Boundary: North latitude 39 36.000 from west longitude 123 47.500 to the extent of state waters West Boundary: The state water boundary South Boundary: Line coming west from the rock at the mouth of the Ten Mile River starting at west longitude 123 47.500 to the extent	<b>Designation</b> SMR	Preliminary Level of Protection* Very High	Propose Tribal Uses? No	Proposed Take Regulations  Take of all living marine resources is prohibited.
Ten Mile SMCA	1001295	Southern	of state waters East Boundary: West longitude 123 47.500  North Boundary: North latitude 39 36.000 to west longitude 123	SMCA	Undetermined	Yes	Take of all living marine resources is prohibited except:  1. Traditional, non-commercial, tribal gathering, subsistence,
			47.500 West Boundary: West longitude 123 47.500 South Boundary: Line coming due west off the rock at the mouth of the Ten Mile River to west longitude 123 47.500 East Boundary: Mean high tide line				harvesting, ceremonial and stewardship activities.
Ten Mile Estuary SMCA	1001445	Southern	From the mouth of Ten Mile River inland to include all of the estuary in state waters.	SMCA	Undetermined	Yes	Take of all living marine resources is prohibited except:  1. Traditional, non-commercial, tribal gathering, subsistence, harvesting, ceremonial and stewardship activities.

MPA Name	Other Proposed Regulations	Site-specific Rationale	Other Considerations
Ten Mile SMR	None specified	This SMR/SMCA complex protects biodiversity through the protection of diverse habitats and also links to the adjacent estuarine habitats consisting of eelgrass beds, marshlands and mudflat ecosystems. This MPA also protects a spawning aggregation area of steelhead, coho and Chinook salmon. The area also includes pinniped haulouts and critical nesting and breeding bird habitat, including the endangered snowy plovers.	Socioeconomic impact: significant negative impact to the sea urchin industry (estimated \$200,000 gross), moderate negative impact on live fishing and crabbing; potential negative impact on seaweed harvesting due to effort shift if other areas are closed to harvesting; minimal impact on abalone harvesting.  Placing this reserve 41 miles N of the Pt. Arena SMR minimizes the cumulative effects of effort shift for all commercial, recreational, and subsistence fishing and seaweed harvesting, that would otherwise take place if an MPA was sited within the preferred 31-mile spacing guidelines (e.g., at Noyo Harbor).  Located at the north end of this MPA is an established marine monitoring site, that along with numerous coastal access points makes it easy for research, recreation and enforcement possible.  This area includes a portion of the MacKerricher State Park Ingelnook Fen-Ten Mile Dunes Natural Preserve. Beach access increases the feasibility of enforcement.
Ten Mile SMCA	None specified	This MPA protects biodiversity through the protection of diverse habitats and also links to the adjacent estuarine habitats consisting of eelgrass beds, marshlands and mudflat ecosystems. This MPA also protects a spawning aggregation area of steelhead, coho and Chinook salmon. The area also includes pinniped haulouts and critical nesting and breeding bird habitat, including the endangered snowy plovers.	This MPA is designed to connect with the offshore SMR and provide equivalent inshore protection (no commercial or recreational take) as the reserve while allowing tribal uses.
Ten Mile Estuary SMCA	Removal of invasive species allowed.	This SMCA protects larval source and enhance reproductive capacity of numerous invertebrate species such as Dungeness crabs, ghost shrimp et al. Protects spawning and nursery grounds for populations that are harvested offshore.	Estuaries support local fish and shellfish populations that are harvested commercially and recreationally and also serve as spawning and nursery grounds for populations harvested offshore. Estuaries rank along with tropical rainforests and coral reefs as the world's most productive ecosystems, more productive than both the rivers and the ocean that influence them. This MPA expands on long-term protections for complex estuarine habitats, including eelgrass beds, marshlands and mudflat ecosystems. Supports current DFG coho and steelhead salmon habitat conservation projects while protecting essential nursery for federal and state listed threatened anadromous fish including Coho, King and Steelhead salmon. Almost the entire stretch of this MPA is close to population centers, with numerous coastal access points making research, long-term monitoring, recreation and enforcement possible. This MPA is designed to provide equivalent protection (no commercial or recreational take) as an SMR while allowing tribal uses.

### Round 2: Description of Marine Protected Areas (MPAs) in Ruby Draft MPA Proposal 1

Spreadsheet Created May 27, 2010

MPA Name	MPA ID	Bioregion	MPA Boundaries (Exact or Approximate)	Designation	Preliminary Level of Protection*	Propose Tribal Uses?	Proposed Take Regulations
MacKerricher SMCA	1001473	Southern	This area is bounded by the mean high tide line, the 3-fathom depth contour and the following points: 39 29.81' N. lat. 123 47.50' W. long.; 39 29.95' N. lat. 123 47.80' W. long.; approximately 39 27.12' N. lat. 123 48.97' W. long.; and approximately 39 27.12' N. lat. 123 48.80' W. long.		Low	No	The take of all living marine resources is prohibited except:  1. The recreational take of Finfish, red abalone, chiones, clams, cockles, rock scallops, native oysters, crabs, lobster, ghost shrimp, sea urchins, mussels and marine worms except that no worms may be taken in any mussel bed unless taken incidentally to the take of mussels  2. The commercial take of Finfish, crabs, ghost shrimp, jackknife clams, sea urchins, squid, algae except giant kelp and bull kelp and worms except that no worms may be taken in any mussel bed, nor may any person pick up, remove, detach from the substrate any other organisms, or break up, move or destroy any rocks or other substrate or surfaces to which organisms are attached.
Point Cabrillo SMCA	1001278	Southern	Southern boundary = 39° 20.606' Northern boundary = 39° 21.209' Western boundary = 123° 50' East boundary = Mean high tide line	SMCA	Undetermined	Yes	Take of all living marine resources is prohibited except:  1. Traditional, non-commercial, tribal gathering, subsistence, harvesting, ceremonial and stewardship activities.
Russian Gulch SMCA	1001558	Southern	This area is bounded by the mean high tide line, the 3-fathom depth contour and the following points: 39 19.86' N. lat. 123 48.84' W. long.; 39 19.85' N. lat. 123 48.89' W. long.; 39 19.52' N. lat. 123 48.46' W. long.; and 39 19.52' N. lat. 123 48.23' W. long.	SMCA	Low	No	The take of all living marine resources is prohibited except:  1. The recreational take of Finfish, red abalone, chiones, clams, cockles, rock scallops, native oysters, crabs, lobster, ghost shrimp, sea urchins, mussels and marine worms except that no worms may be taken in any mussel bed unless taken incidentally to the take of mussels.  2. The commercial take of Finfish, crabs, ghost shrimp, jackknife clams, sea urchins, algae except giant kelp and bull kelp and worms except that no worms may be taken in any mussel bed, nor may any person pick up, remove, detach from the substrate any other organisms, or break up, move or destroy any rocks or other substrate or surfaces to which organisms are attached.

### California MLPA North Coast Study Region Round 2: Description of Marine Protected Areas (MPAs) in Ruby Draft MPA Proposal 1

Spreadsheet Created May 27, 2010

MPA Name	Other Proposed Regulations	Site-specific Rationale	Other Considerations
MacKerricher SMCA	None specified	Maitains existing MPA	Modified the existing MPA by extending the southern boundary south to include new state park lands.
Point Cabrillo SMCA	None specified	Protect biodiversity and provide goal 3 opportunities	Area is currently a SMCA allowing commercial finfishing and seaweed harvest. This SMCA would replace the existing Pt. Cabrillo SMCA; making the boundaries more feasible using visible landmarks. Contains high-quality invertebrate habitat closed to commercial and recreational take of invertebrates since 1975. Area was also closed to recreational take of finfish while allowing commercial take of finfish. Local biologists say area is large enough to conduct studies on sea urchins and abalone. Adjacent to a state park for recreational non-extractive activities. Accessible for research. Maintains a long time series of data from previous studies. Area is perfect for an adaptive management study and collaborative research with the local fishing community, biologists and tribes. Commercial nearshore fleet has voluntarily not been fishing here, and seaweed harvesters not gathering here so we do not anticipate a negative socioeconomic impact, but may be a concern for seaweed harvesters if other areas are closed to them.
Russian Gulch SMCA	None specified	Maintains existing MPA	None specified

### Round 2: Description of Marine Protected Areas (MPAs) in Ruby Draft MPA Proposal 1

MPA Name	MPA ID	Bioregion	MPA Boundaries (Exact or Approximate)	Designation	Preliminary Level of Protection*	Propose Tribal Uses?	Proposed Take Regulations
Big River Estuary SMP	1001462	Southern	Seaward boundary is east of the highway 1 bridge at the old highway abutment on the north side of the river directly south (below catch a canoe) and inland to the extent of state waters boundary.	SMP	Undetermined	Yes	The take of all living marine resources is prohibited except:  1. The recreational take of Dungeness crab by trap; and Dungeness crab by diving.  2. Traditional, non-commercial, tribal gathering, subsistence, harvesting, ceremonial and stewardship activities.
Van Damme SMCA	1001559	Southern	This area is bounded by the mean high tide line, the 3-fathom depth contour and the following points: 39 16.45' N. lat. 123 47.60' W. long.; 39 16.355' N. lat. 123 47.60' W. long.; 39 16.27' N. lat. 123 47.545' W. long.; and 39 16.27' N. lat. 123 47.43' W. long.	SMCA	Low	No	The take of all living marine resources is prohibited except:  1. The recreational take of Finfish, red abalone, chiones, clams, cockles, rock scallops, native oysters, crabs, lobster, ghost shrimp, sea urchins, mussels and marine worms except that no worms may be taken in any mussel bed unless taken incidentally to the take of mussels.  2. The commercial take of Finfish, crabs, ghost shrimp, jackknife clams, sea urchins, algae except giant kelp and bull kelp and worms except that no worms may be taken in any mussel bed, nor may any person pick up, remove, detach from the substrate any other organisms, or break up, move or destroy any rocks or other substrate or surfaces to which organisms are attached.
Navarro River Estuary SMCA	1001466	Southern	Mouth of the Navarro River inland to the extent of state waters.	SMCA	Undetermined	Yes	The take of all living marine resources is prohibited except:  1. The recreational take of salmonids by hook and line.  2. Traditional, non-commercial, tribal gathering, subsistence, harvesting, ceremonial and stewardship activities.

MPA Name	Other Proposed Regulations	Site-specific Rationale	Other Considerations
Big River Estuary SMP	Removal of invasive species allowed.		This MPA is designed to allow tribal uses and some recreational uses. Within State Parks boundaries. Key recreational kayaking area. A boost to local economy because estuary is protected. Shorebird habitat protected.
Van Damme SMCA	None specified	Maintains existing MPA	None specified
Navarro River Estuary SMCA	Removal of invasive species allowed.		This MPA is designed to provide equivalent protection (no commercial or recreational take) as an SMR while allowing tribal uses.  Recreational kayaking and canoeing destination. Attraction to easy proximity to State Park beach and shorebird and mammal viewing.

#### **California MLPA Initiative**

## MLPA North Coast Study Region: Round 2 Evaluations MPA Goals and Regional Objectives for Ruby Draft MPA Proposal 1 Document created June 17, 2010

The marine protected area (MPA) design process includes setting goals and regional objectives that are consistent with the Marine Life Protection Act (MLPA). During Round 2 of the MLPA North Coast Project, goals were assigned during MPA deliberations and then the objectives were assigned and reviewed by North Coast Regional Stakeholder Group (NCRSG) members after Round 2 had been completed. The north coast goals are taken verbatim from the MLPA itself, and the regional objectives were developed by the NCRSG. The following table includes the goals and regional objectives assigned to each MPA included in Ruby Draft MPA Proposal 1. This document is designed to supplement the Round 2 Description of MPAs spreadsheets found on the Marine Life Protection Act Initiative's webpage (http://www.dfg.ca.gov/mlpa/mpaproposals\_nc.asp).

#### Codes and acronyms used in the table:

G = Goal; O = Objective. Example: G1: (O-1, O-3) would stand for Goal 1, Objectives 1 and 3. SMCA = state marine conservation area SMP = state marine park SMR = state marine reserve

SMRMA = state marine recreational management area

Proposed MPA Name	Goals and Regional Objectives
Pyramid Point SMR	G1: (O-2, O-3, O-4), G2: (O-1,O-2), G4: (O-1, O-2), G6: (O-1, O-2)
Pyramid Point SMCA	G1: (O-2, O-3, O4), G2: (O-1,O-2), G4: (O-1, O-2), G6: (O-1, O-2)
Point St. George Reef SMCA	G3: (O-2), G4: (O-1, O-2)
False Klamath Cove SMCA	G1: (O-1, O-2, O-4), G2: (O-2), G3: (G3), G5: (O-2), G6: (O-1, O-2)
Reading Rock Nearshore SMCA	G2: (O-4), G3: (O-2), G4: (O-1)
Reading Rock Offshore SMCA	G1: (O-2), G4: (O-1,O-2), G6: (O-1)
Stone Lagoon SMRMA	G1: (O-1,O-4), G4: (O-1, O-2), G5: (O-2)
Samoa SMCA	G3: (O-1), G4: (O-1)
North Humboldt Bay SMRMA	G1: (O-4, O-5) G2: (O-3), G4: (O-1), G5: (O-1, O-2, O-4), G6: (O-2)
South Humboldt Bay SMRMA	G1: (O4, O5), G2: (O3), G4: (O-1), G5: (O1, O2, O4), G6: (O-2)

<sup>&</sup>lt;sup>1</sup> Document Source: <u>http://nrm.dfg.ca.gov/FileHandler.ashx?DocumentVersionID=33653</u>

Proposed MPA Name	Goals and Regional Objectives
South Cape Mendocino SMR	G1: (O-1, O-2, O-5), G2: (O-2) G3: (O-2), G4: (O-1), G5: (O-4) G6: (O-1, O-2)
Mattole Canyon SMR	G1: (O1, O-2, O-3), G3: (O-1) G4: (O-1), G5: (O-1, O-2, O-3), G6: (O-1)
Petrolia Lighthouse SMR	G1: (O-1, O-2, O-5), G3: (O-1,O-2), G4: (O-1, O-2), G5: (O-3, O-4)
Vizcaino SMCA	G1: (O-2, O-3, O-4), G2: (O-3, O-4)
Ten Mile SMR	G1: (O-2, O-3, O-5) G2: (O-2, O-3) G3: (O-1, O-2), G5: (O-2, O-3) G6: (O-1, O-2)
Ten Mile SMCA	G1: (O-2, O-3, O-5), G2: (O-2, O-3), G3: (O-1, O-2), G5: (O-2, O-3), G6: (O-1, O-2)
Ten Mile Estuary SMCA	G1: (O-4), G2: (O-3), G3: (O-1, O-3), G4: (O-2), G5: (O-2, O-3)
MacKerricher SMCA	G3: (O-1, O-3)
Point Cabrillo SMCA	G3: (O-1, O-3)
Russian Gulch SMCA	G3: (O-1)
Big River Estuary SMP	G1: (O-4), G2: (O-3), G3: (O-1, O-3), G4: (O-2), G5: (O2, O-3), G6: (O-2)
Van Damme SMCA	G3: (O-1)
Navarro River Estuary SMCA	G1: (O-3, O-4), G2: (O-3), G3: (O-1, O-3), G4: (O-2), G6: (O-2)